THIRTY-SIXTH

ANNUAL REPORT

OF THE

SANITARY CONDITION

OF THE

BOROUGH OF LONGTON,

WITH

Vital Statistics for the Year 1900,

BY

W. J. DAWES, M.R.C.S., L.S.A., L.M., ENG.,

Medical Officer of Health for the Borough.

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1901.

Longton,

April, 1901.

To the Sanitary Committee of the Borough of Longton.

Mr. Chairman and Gentlemen,

I have the honour of presenting to you my Annual Report of the Sanitary state of the Borough, with Vital Statistics, for the year 1900, this being the thirty-sixth year of incorporation and the twentieth of my office.

The area of the Borough is still about 2,000 acres; the population is estimated to be 37,210; therefore the number of persons per acre is about 18.6.

The population, computed according to the number of inhabited houses, should be increased by 400 for the year; the natural increase, *i.e.*, the increase of births over deaths, is 415. The increase of the population since the census of 1891, when the population was found to be 34,327, is 2,883 according to the number of inhabited houses, and the natural increase is 3,869.

Messrs. Martin and Cope have kindly furnished me with information showing that there are in the Borough 7,555 houses, of which 6,977 are inhabited, leaving 578 void. In 1891 the number of houses in the Borough was 6,614, of which 6,365 were inhabited, and 249 void; so, if we deduct the number of houses given for 1891 from the number for 1900, we find the increase to be 1,190, and as the population is estimated to be, in accordance with the last census return, 5⅓ per *inhabited house*, it is shown that the deduction of the voids from the number of houses for 1900, *i.e.*, 7,555 less 578 voids, we have 6,977 inhabited, and this number multiplied by 5⅓, the number of persons per house, we should have an increased population of 37,210, which, compared with the population of 1891, works out an increase of 2,883, or an annual average increase for nine years of 320, a very poor increase for the number of births registered per annum. The average natural increase is 540.

We must feel somewhat concerned about the slow growth of our population, and must consider how it is caused, and seek for a remedy, if possible.

The chief causes of so slow an increase of our population are the continued high infantile mortality and the leakage caused by the erection of new habitations on the confines of the Borough, and as business men you must easily understand that increased expenditure necessitated by much-needed improvements of various kinds, and also increased outlay in sanitary work in the Borough, should have a healthy growth of its population, and so lighten the burthen of consequent increased taxation per inhabitant; as it is, a great many do not pay their share, although sharing in the advantages; of course, I am referring to those who leave the Borough to live in the outskirts, and yet depend upon the Borough for employment and other accommodations. This exodus has increased rapidly lately, and will continue to do so, and the number of void houses will be increased also. In 1891, when the population was 34,327, the number of void houses was 240 out of a total of 6,614, and in this year, 1900, the number of voids is 578, or 329 more than in 1891, the population being, for 1900, 37,210. This increase is serious when we consider that our population has only increased by about 2,183 in nine years. A Table in the Statistics will show you how steadily the increase of void houses has gone on during the past decade.

Of course, this migration of a considerable number of our people plays its part in preventing a healthy growth of the population.

So far as the Infantile Mortality is concerned in this matter of slow growth of the population, we have two causes at work: firstly, the vitiating influence of impure air, due to the existence of cesspools and ashpits in close connection with the habitations, so either when playing in the small yard, taking food, or sleeping, the small children inhale the poisoned atmosphere, which lowers, very easily, the standard of their vitality; this, combined—as it is too frequently—with improper feeding, renders them more liable to disease, especially in times of visitation of some infectious disease, and the vital force being so depressed, as I have above described, such diseases assume a much more malignant form than they do in children breathing a purer atmosphere and more suitably fed.

The causes of the bad atmosphere are things for which the Sanitary Authority is responsible, inasmuch as they can be removed. But in the matter of proper feeding of infants and the general management of them, we are dependent upon the mothers. The remedy for this great evil, this want of knowledge on the part of mothers, is not within the range of the powers of the Sanitary Authority, but rests entirely with the parents, who, not knowing how to feed and manage their helpless little ones, fail, through not having a proper appreciation of their responsibilities in this important duty, to seek for and acquire the requisite knowledge. This state of things is much to be deplored. The girl's time each day is fully occupied in attending school and studies at home, and when, at the age of fourteen or fifteen, she leaves school she must as a rule find work in a manufactory, or take some kind of a situation, and when the time arrives that she has a home of her own, it is found she has no knowledge of domestic matters, and, as a consequence, the house is not comfortable, the finances are wasted, and though last not the least by any means of the many evils, their infants in too many cases die prematurely. We feel quite helpless in this matter, yet we must hope that, combined with better education, a higher moral standard may be developed, self-respect cultivated, and the various responsibilities of home life better acknowledged and acted up to, the good results of which would be shown both individually and collectively: individually in the improved manners and homes of the people, and collectively so far as the well-being of the nation is concerned, for good citizens are always patriotic and ready to support their rulers in the hour of need. Good home life, therefore, is the nursery to which the nation looks for its great support, and whether it be palace or cottage, the principle applies. We should live and act not only for the present, but also for the future.

I must ask to be excused for my seeming digression in airing the above views, but being anxious for a more healthy state of our Borough and a much improved infantile death rate, and knowing how much a better knowledge of the principles I have enunciated has to do with achieving such blessings, I could not refrain from doing so.

As regards the general Sanitary work done in the year, I am quite satisfied that all has been done that could be, and that the Inspector, Mr. Cook, and his assistant, have, as usual, been very attentive, and that all notifications sent in to me have been called for each morning, and the houses reported visited the same day, with very few exceptions, and any insanitary condition found has been done away with as quickly as possible.

You will find appended Mr. Cook's report upon the work done during the year.

It is also very gratifying to see that our long-wanted Isolating Hospital is to be erected this year, and that the Authority is contemplating substituting the modern dustbin for the unpleasantly odorous ashpit, which takes up space in the small areas at the backs of the houses, and also doing away with the cesspools, either wholesale or at least more rapidly than by the present method, which at the present rate will require about fifteen years to complete the work. If it were not for the existence of these abominable collecting pits, we should have less Typhoid and other infectious, and there would be less expenditure of money per annum, which is also an important matter.

The proper flushing of the Sewers is also in hand, and Mr. Wardle, our Surveyor, is instructed to work out a plan by which this highly important work can be accomplished. Nature has recently, by a long period of rainy weather and occasional storms, read us a lesson in this, and shown how flooding the sewers lessens disease.

During the year 1900, 46 cases were treated in the Temporary Hospital, and one private case (Scarlet Fever) not included in the 46 cases. Ten of the number were Diphtheria, and no death; and 36 cases of Scarlet Fever, and one death. The total number of cases of Diphtheria treated in the Hospital since its opening is 138, of which number 102 were prior to April, 1899, of which number 8 died, 4 of them being beyond treatment when taken in; 3 of the remaining cases died suddenly from collapse, although recovering. There is a liability to this in cases of Diphtheria, especially in badly nourished children, which was the case with these unfortunates. Thirty-six cases of Diphtheria have been treated in the Hospital since April, 1899, and no deaths. Sixty cases of Scarlet Fever have been treated in Hospital, and one death. This was a very bad case, and far advanced when admitted.

These results of treatment in the Hospital—a place not worthy of the name—are highly satisfactory. The benefit does not stop at the recovery of the patients, but has frequently prevented the extension of the disease to the rest of the family, for when the first case in a family was reported, and no means of isolating at home, it was forthwith taken to the Hospital, and everything possible done to disinfect the home.

I am pleased to say that Sanitation is taking a much more prominent place in your deliberations *re* the sanitary welfare of the Borough, and that when we have added some Long-Toms and 15-pounders to our armaments in the shape of an Isolating Hospital, taken away the ash-pits and cesspools, and instituted a means of more thoroughly flushing the sewers (our Maxims and Pom-Poms could not reach the evils resulting from these defects), we shall soon defeat the enemy, and shall have a state of health in the Borough which we may be justly proud of.

In the Statistics you will find that Measles accounts for 105 deaths out of a total of 227 deaths, being 17 deaths under one half the total number. It is the highest number of deaths from any zymotic disease during the past ten years; the next to it was in 1898, when Diphtheria was so bad, 102 deaths being caused by it.

Diarrhœa prevailed much, and caused 69 deaths.

Scarlet Fever and Typhoid each account for 14 deaths.

These high death-rates are in great measure the result of gathering the children together in the schools, a great number of them coming from infected homes or areas, some beginning to develop the particular disease prevailing, and some only just convalescent. This strict school attendance is the result on the one hand of the anxiety of the parents to get their children out of the way; and on the other, the School Attendance Officer is too desirous to give a good account of himself, and fails to give some cases the benefit of the doubt, and by the threat of a summons causes the parents to go contrary to their own opinions, and send their children to school. This state of things is difficult to combat, and therefore these dreadful epidemics must occasionally, I am afraid, visit us.

I think, after acknowledging our Surveyor's endeavours to do his best with the rather limited means at his command, I cannot refrain from asking for a more efficient way of dealing with dust or mud, not only in the main streets, but also in some of the bye-streets.

You will find some interesting Tables attached to this Report.

The Inspector rightly informs you that the Borough has been efficiently inspected.

Thanking you for your usual courtesy,

I am, Gentlemen,

Your Obedient Servant,

W. J. DAWES,

Medical Officer of Health.

VITAL STATISTICS FOR 1900.

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Area and Population.

The area of the Borough is about 2,000 acres; the population for the year is estimated to be 37,210: therefore, the number of persons per acre is 18.6.

As computed according to the number of inhabited houses, the population shows an increase of 400: the natural increase, *i.e.*, the increase of births over deaths, is 415. The increase of the population since the census of 1891, is 2,883 according to the number of inhabited houses, and the natural increase is 3,869.

Messrs. Martin and Cope have kindly furnished me with information showing that there are 7,555 houses in the Borough, of which 6,977 are inhabited, leaving 578 void. Of the inhabited houses in 1900, 4,099 are in the old Borough and East Vale, being a decrease of 12 on the previous year; 2,243 are in Florence, being an increase of 82; and 635 in Dresden, an increase of 5.

The following Table will show the fluctuations since the Census:

	No. of Houses in the Borough	Void	Inhabited	Population
1891	6,614	249	6,365	34,327
1892	6,736	168	6,568	35,031
1893	6,849	257	6,592	35,240
1894	7,020	309	6,711	35,784
1895	7,028	327	6,701	35,821
1896	7,173	378	6,795	36,240
1897	7,661	332	7,339	39,104
1898	7,238	475	6,763	36,069
1899	7,430	498	6,902	36,810
1900	7,555	578	6,277	37,210

Year	Population	Increase according to the Number of Houses	Natural Increase
1891	34,327	census	—
1892	35,031	704	768
1893	35,240	209	534
1894	35,874	634	508
1895	35,821	53 decrease	674
1896	36,240	419	542
1897	39,104	277	488
1898	36,069	448 decrease	436
1899	36,810	741	496
1900	37,210	400	415

The average increase of the population since the census in 1891 is, according to the number of houses, 320, and the average natural increase is 540.

The number of persons per house is estimated at 5⅓.

Births.

The total number of Births registered during the year was 1,392 (705 males and 687 females), as against 1,355 (662 males and 686 females) for the previous year.

Deaths.

Of the deaths, which numbered 977, 515 were males and 462 females—356 were under one year, 172 between one and five years, 362 over five and under sixty-five, and 87 over sixty-five.

Birth Rate and Death Rate.

The birth-rate per 1,000 of the population is 37.4. The death-rate is 26.22.

Maximum and Minimum Birth Rate.

The highest birth-rate during the year was in the month of February, when it reached 47.57, and the lowest in December, 28.6 per thousand of the population.

Maximum and Minimum Death Rate.

The maximum death-rate was reached in August and September, both being 32.2, and the minimum in June, being 15.9 per 1,000.

The Birth and Death rates for the last ten years are affixed:—

	Birth Rate	Death Rate
1891	41·25	26·85
1892	40·62	24·8
1893	40·23	25·08
1894	39·03	21·18
1895	40·67	24·65
1896	37·5	22·6
1897	38·5	25·1
1898	39·14	27·05
1899	36·8	23·33
1900	37·4	26·5

Infant Mortality.

The Infant Mortality still maintains its high figure; 528, or 53 per cent., of the total deaths are under five years of age. Of this number, 356 are under one year. Of the deaths under five years, 99 were from Measles, 76 from diseases of the Respiratory system, 64 from Diarrhœa, and 11 from Scarlet Fever.

In 1891 the percentage was ... ... 51·4
1892 ,, ,, ... 51·8
1893 ,, ,, ... 52·9
1894 ,, ,, ... 57·6

In 1895 the percentage was	56·5
1896 ,, ,, ...	58·3
1897 ,, ,, ...	59·1
1898 ,, ,, ...	55·9
1899 ,, ,, ...	54·5
1900 ,, ,, ...	53

356, or 25.5 per 100, of the children born in the year died.

The average at death for the year is 21 years 7 months, but if we exclude infants under five years we have an average duration of life of 46 years. The average age of infants is 10 months and 14 days. Average Age.

Included in the total of deaths are 51 who died in the North Staffordshire Infirmary and in the Stoke Workhouse.

In compliance with the Infectious Diseases (Compulsory Notification) Act in 1899, adopted by the Borough in March, 1891, 543 cases of Infectious Diseases were notified during the year. Of this number, there were:—

Scarlet Fever	319
Diphtheria	117
Enteric Fever	58
Erysipelas	41
Croup	4
Puerperal Fever	4
	543

The cost of notification was as follows:

	£	s.	d.
First Quarter...	17	1	0
Second Quarter	14	1	0
Third Quarter	11	12	6
Fourth Quarter	24	14	6
For the year	£67	9	0

The number of cases of Scarlet Fever is 319, with 14 deaths. Scarlet Fever

There were 117 cases of Diphtheria, with 12 deaths. Diphtheria.

There were 41 cases of Erysipelas, and 1 death. Erysipelas.

There were 58 cases of Typhoid, and 14 deaths. Typhoid.

Diarrhœa and Dysentery caused 69 deaths, 61 under five years of age, and 8 over five. Diarrhœa.

Zymotic Diseases.

The total number of fatal Zymotic diseases during the year was 227, being 23.2 per cent. of the total deaths, and 6.1 per 1,000 of the population. The adjoined Table shows the rate of deaths from zymotic diseases for the last ten years:—

	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900
Scarlatina ...	22	13	5	4	9	2	1	2	25	14
Diphtheria ...	4	0	5	0	4	22	95	102	12	12
Croup ...	3	1	8	1	2	0	10	2	1	1
Typhoid Fever	11	7	25	12	17	6	6	15	11	14
Puerperal Fever	2	0	2	0	2	3	0	2	2	2
Erysipelas ...	2	2	4	1	0	2	0	0	1	1
Pertussis ...	2	66	10	25	6	7	24	4	49	0
Diarrhœa ...	35	31	49	27	63	48	40	72	76	69
Measles ...	77	1	45	4	0	81	13	21	1	105
Influenza ...	0	0	0	0	0	0	0	0	0	9
Total	158	121	153	74	103	171	190	220	178	227

Respiratory System.

Diseases of the respiratory system proved fatal in 223 cases, of which 93 were Bronchitis, 52 Phthisis, 42 Broncho-pneumonia, 23 Pneumonia, 10 Asthma, 1 Pleurisy, 1 Laryngitis, and 1 Croup. The death-rate from diseases of the Respiratory system is 22.8 per 100 of the total number of deaths, and 5.9 per 1,000 of the population.

	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900
Bronchitis Pneumonia Congestion of the Lungs Broncho-pneumonia Pleurisy	207	174	175	136	166	155	140	169	157	159
Phthisis ...	48	34	51	49	74	34	42	35	45	52
Asthma ...	12	16	17	10	20	12	11	11	8	10
Laryngitis ...	4	5	1	3	2	2	5	...	3	1
Croup ...	...	...	...	...	...	...	6	1	...	1
Total	271	229	244	198	262	203	204	216	213	223

Lead Poisoning.

There were 3 deaths from Lead Poisoning, 2 males and 1 female.

There were 32 deaths from violent causes, and 42 Inquest cases.

Ward List of Infectious Diseases Notified.

Ward		Scarlet Fever	Diphtheria	Enteric Fever	Erysipelas	Croup	Puerperal Fever
Dresden	...	46	14	4	4	0	0
Florence	...	41	16	9	3	1	1
Market	...	11	2	2	1	0	0
Meir	...	8	3	3	2	0	0
Normacot	...	34	20	8	12	0	2
Sandford Hill	...	41	9	7	4	0	1
St. James'	...	23	14	3	0	0	0
St. John's	...	50	12	5	6	1	0
St. Paul's	...	38	19	10	3	1	0
Sutherland	...	27	8	7	6	1	0
Total	...	319	117	58	41	4	4

Appended is the Sanitary Inspector's Report, also various Tables, copies of forms supplied by the County Council.

Sanitary Work carried out during the Year 1900.

Nine hundred and five applications have been made for the removal of nightsoil from Longton, as against 928 the previous year, and being a decrease of 23.

5,065 loads, or 7,015-tons 5-cwt., of ashes have been removed from Longton and East Vale, being an increase of 138 loads, or 77-tons 14-cwt.: 1,956 loads, or 280-tons 18-cwt., from Florence, being a decrease of 74 loads, or 88-tons 5-cwt.; 595 loads from Dresden, being a decrease of 39 loads, or an increase of 37-tons 3-cwt.

NOTICES SERVED.

482 Notices have been served, dealing with the following nuisances, viz.:—

Houses having no water supply	5
Houses having water unfit for domestic use	0
Houses closed	8
Houses having no spouting, and various repairs	48
Over-crowding	2
Defective closets	24
Pipes to slopstones	13
Cesspools converted to flush closets	200
Ashpits covered	15
Drains choked	68
Drains defective	8
Drains not trapped	10
Yard and passage paving	40
Accumulation of Manure	2
Miscellaneous not mentioned under the above heads...	39
	482

There are in the Borough 100 Bakehouses, 24 Slaughter-houses, 12 Dairies and Cowsheds, and 34 Milk Shops.

The Disinfecting Chamber has been used 266 times for bedding, etc.; 246 houses have been disinfected; the sewers have been frequently flushed and disinfected, and a liberal supply of disinfectants have been used and given away.

The Borough has been systematically inspected, together with Lodging-houses, Bakehouses, Slaughter-houses, Dairies and Milk-shops.

704 Whitewash Brushes have been lent during the year, and 20 loads of Lime used.

WM. COOKE,

Inspector

TABLE I.

URBAN DISTRICT OF LONGTON.

TABLE OF BIRTHS AND DEATHS, 1890 to 1900.

Year.	Population estimated to middle of each Year.	BIRTHS.		DEATHS.			
				UNDER ONE YEAR OF AGE.		AT ALL AGES. NETT.	
		Number.	Rate.	Number.	Rate per 1,000 Births registered.	Number.	Rate.
1890	38·860	1·339	37·33	310	230·7	847	23·58
1891	34·327	1·416	41·25	318	224	922	26·85
1892	35·031	1·423	40·62	329	231·2	869	24·8
1893	35·240	1·418	40·23	320	225·6	884	25·08
1894	35·874	1·411	39·03	337	238·8	760	21·18
1895	35·821	1·457	40·67	341	234	883	24·65
1896	36·240	1·361	37·5	320	235	819	22·6
1897	39·104	1·408	38·5	357	253·5	920	25·1
1898	36·069	1·412	39·14	388	274·7	926	27·05
1899	36·810	1·355	36·8	333	242·8	859	23·33
Averages for years 1890-1899.	36·037	1·400	38·73	335	238·6	868	24·3
1900	37·210	1·392	37·81	356	255·7	971	25·8

Area of District in Acres (exclusive of area covered by water) 2,000

Total population at all ages ...	34,327	At Census of 1891.
Number of inhabited houses ...	6,365	
Average number of persons per house ...	$5\frac{1}{3}$	

TABLE II.

URBAN DISTRICT OF LONGTON.

YEAR	Population estimated to middle of each Year	Births Registered	Deaths at all Ages	Deaths under 1 year
	a	b.	c.	d.
1890 .	35,860	1,339	847	310
1891 ...	34,327	1,416	922	318
1892 ...	35,031	1,423	869	329
1893 ...	35,240	1,418	884	320
1894 ...	35,874	1,411	760	339
1895 ...	35,821	1,457	883	341
1896 ...	36,240	1,361	819	320
1897 ..	39,104	1,408	920	357
1898 ...	36,069	1,412	926	388
1899 ...	36,810	1,355	857	333
Averages of Years 1890 to 1899	36,037	1,400	868	335
1900 ...	37,210	1,392	971	356

TABLE III.

URBAN SANITARY DISTRICT OF LONGTON, *Staffs.*

Cases of Infectious Disease notified during the Year 1900.

	Diphtheria	Erysipelas	Scarlet Fever	Enteric Fever	Puerperal Fever	Membraneous Croup
Total cases reported among persons belonging to District	117	41	389	58	4	4

TABLE IV.

URBAN DISTRICT OF LONGTON.

Causes of, and Ages at, Death during the Year 1900.

Cause of Death.	Deaths in whole District at subjoined Ages.							Deaths in Public Institutions.
	All Ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and up-wards.	
Measles	105	40	62	2	1	...	...	1
Scarlet Fever	14	3	8	1	..	1	1	1
Diphtheria and Membraneous Croup ...	12	1	7	2	1	1	...	
Croup	1	...	1	...	...	...	...	
Enteric Fever	14	...	2	4	3	5	...	
Epidemic Influenza	9	2	..	1	1	4	1	
Diarrhœa	69	61	8		...	...	.	1
Enteric	21	12	2	1	...	4	2	1
Puerperal Fever	2	...	...	...	1	1	...	
Erysipelas	1	1	...	...	...	. .	...	
Other Sceptic Diseases	1	...	...	...	...	1	...	
Phthisis	52	...	3	1	2	46	...	10
Other Tubercular Diseases	17	7	4	2	1	3	...	3
Cancer, Malignant Disease	22	...	...	...	...	18	4	2
Bronchitis	93	22	7	4	...	46	14	13
Pneumonia	23	2	3	4	2	11	1	
Pleurisy	1	...	..	...	...	1	...	
Other Diseases of Respiratory Organs ...	63	29	12	...	1	18	3	
Alcoholism, Cirrhosis of Liver	5	...	...	...	...	5	...	
Venereal Diseases...	2	...	2	..	...	...	...	1
Premature Birth	29	29	...	...	...	...	...	
Diseases and Accidents of Parturition ...	10	...	...	...	2	8	...	
Heart Diseases	52	1	1	2	1	38	9	4
Accidents	30	2	5	8	4	8	3	8
Suicides	4	...	...	...	1	2	1	
All other causes	325	144	45	8	6	74	48	16
All causes	977	356	172	40	27	295	87	61

TABLE V.

URBAN SANITARY DISTRICT OF LONGTON.

Summary of Sanitary Work done in the Inspector of Nuisances' Department during the year 1900.

		Inspections and Observations made.	Formal Notices by Authority.	Nuisances Abated after Notice.
Dwelling-houses and Schools.	Foul Conditions	48	48	48
	Structural Defects			
	Over-crowding	2	8	2
	Unfit for Habitation	8		8
Lodging-houses		30		
Dairies and Milkshops		60		
Cowsheds		15		
Bakehouses		100		
Slaughter-houses		50		
Canal Boats				
Ashpits and Privies		215	15	215
Deposits of Refuse and Manure		2		2
Water Closets		24		24
House Drainage	Defectrive Traps	10		10
	No Disconnection	1		1
	Other Faults	65	6	65
Water Supply		5		5
Pigsties				
Animals improperly kept				
Offensive Trades				
Smoke Nuisances				
Other Nuisances		102		102
TOTALS		737	77	482

	Nos.
Seizures of Unwholesome Food	
Samples of Food taken for Analysis	
,, ,, found Adultered	
,, of Water taken for Analysis	6
,, ,, condemned as unfit for use	0

Precautions against Infectious Disease.

Lots of Infected Bedding Disinfected or Destroyed	266
Houses Disinfected after Infectious Diseases	246
Schools ,, ,, ,,	
Prosecutions for not Notifying Existence of Infectious Disease	
Convictions ,, ,, ,,	
Prosecutions for Exposure of Infected Persons or Things	
Convictions ,, ,, ,,	

(Signed),

WILLIAM COOKE,

Inspector of Nuisances.